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PRE-APPEAL BRIEF REQUEST FOR REVIEWDocket Number (Optional)
9319A-000753

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Application Number
10/817,441Filed
4-2-2004First Named Inventor
Osamu Miyazawa

On November 30, 2006

Signature

Art Unit
2834Examiner
Karen B. Addison

Typed or printed name G. Gregory Schivley/Bryant E. Wade

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

X

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)☒ attorney or agent of record.
Registration number 27,382 / 40,344.☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

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NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/817,441
Filing Date: 2-4-2004
Applicant: Osamu Miyazawa
Group Art Unit: 2834
Examiner: Karen B. Addison
Title: OPERATING APPARATUS AND AN ELECTRIC INSTRUMENT
Attorney Docket: 9319A-000753

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Alexandria, Virginia 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW ARGUMENTS

Claims 1-20 are pending. Claims 14-18 and 20 are allowed. Claims 4-6 and 9 are objected to. Claims 1-3, 7, 8, 10-13 and 19 are rejected under 35 U.S.C. § 103(e) as being unpatentable over Zumeris (U.S. Pat. No. 5,696,421) in view of Vishnevsky (U.S. Pat. No. 4,453,103). Claims 1 and 19 are independent. Claims 2, 3, 7, 8 and 10-13 depend from claim 1.

Independent claims 1 and 19 call for an operating apparatus. An exemplary embodiment of the operating apparatus is illustrated in Figs. 2 and 5 reproduced below.

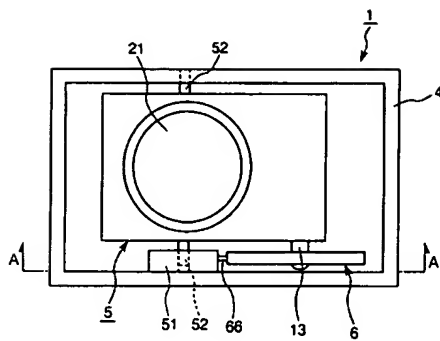


Fig. 2

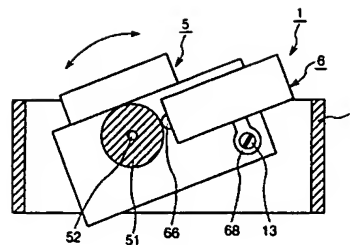


Fig. 5

The operating apparatus 1 of the claimed invention includes: a driven element 5; a frame 4 which rotatably supports the driven element 5; a contacted element 51 which is stationary with respect to the frame 4; and a vibrating element 6 which includes a first piezoelectric element 62 that undergoes extension and contraction by application of an AC voltage, a reinforcing plate 63 having a contact portion 66 and an arm portion 68, and a second piezoelectric element 64 that undergoes extension and contraction by application of an AC voltage, the first piezoelectric element 62, the reinforcing plate 63 and the second piezoelectric element 64 being laminated in this order, and the vibrating element 6 being fixedly mounted on the driven element 5 in a state where the contact portion 66 abuts on the contacted element 51.

Thus, Claim 1 requires, among other features, a vibrating element (6) **being fixedly mounted on the driven element (5)** in a state where the contact portion (66) abuts on the contacted element (51); **wherein the vibrating element (6) receives reaction force from the contacted element (51) when the vibrating element vibrates so that the driven element (5) is rotated**

together with the vibrating element (6) by means of the reaction force.

According to the claimed configuration, the vibrating element 6 receives reaction force from the contacted element 51 when the vibrating element 6 vibrates so that the driven element 5 is rotated together with the vibrating element 6 by the reaction force. Notably, the driven element 5 rotatably displaces around the shaft 52 together with the vibrating element 6 because the vibrating element 6 is fixed on the driven element 5.

Zumeris is completely different from the claimed invention and not relevant. Figs. 8 and 9 of Zumeris are reproduced below.

Fig. 8

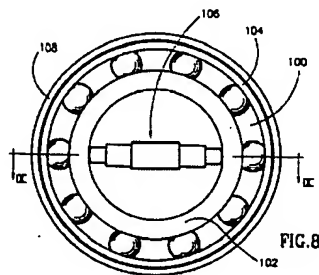
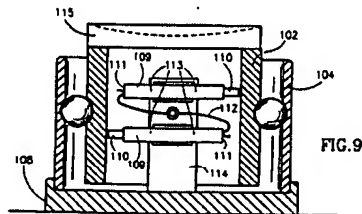


Fig. 9



In contrast to the claimed invention, Zumeris discloses a multi-axis rotation device. Figs. 8 and 9 of Zumeris show an embodiment of the rotation units of the multi-axis rotation device. Zumeris discloses:

(a) An operating apparatus (rotation unit); comprising:

- (b) a driven element (support 115 (inner race 102));
- (c) a frame which rotatably supports the driven element (outer race 104 and friction change unit 108);
- (d) a contacted element (inner race 102) which is stationary with respect to the frame (support 115); and
- (e) a vibrating element (driving elements of motors 110, 109).

Thus, unlike the claimed invention, Zumeris fails to teach or suggest (i) “the vibrating element being fixedly mounted on the driven element”, and (ii) “the vibrating element receives reaction force from the contacted element when the vibrating element vibrates so that the driven element is rotated together with the vibrating element by means of the reaction force”. More particularly, Zumeris teaches driving elements 110 of motors 109 that are mounted on the support 114 which is a stationary member fixedly mounted on the unit 108. Therefore, the driving elements 110 of motors 109 are not fixedly mounted on the driven element (that is, the inner race 102) as required by claim 1. Further, Zumeris teaches that the driving elements 110 of motors 109 do not receive reaction force from the inner race 102 like the claimed invention because the driving elements 110 of motors 109 are mounted on the stationary support 114 while the inner race 102 is rotatably supported by the outer race 104. Further, it also appears that the support 115 and the inner race 102 are not rotated together with the driving elements 110 of motors 109 by means of the reaction force like the claimed invention.

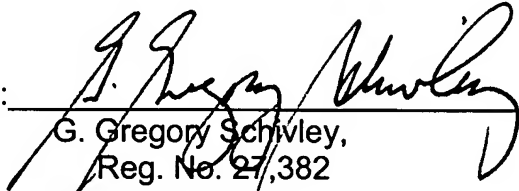
With regard to Vishnevsky, Applicant submits that Figs. 1 and 17 fail to

teach or suggest the above-mentioned features (i) and (ii) of the present invention. Because the configuration of the device of Zumeris is obviously different from that of the claimed invention, Applicant respectfully submits that the claimed invention defined in claim 1 is patentable over Zumeris. Vishnevsky and Miyazawa fail to cure the deficiency of Zumeris. Therefore the claimed invention should be patentable over the prior art.

Respectfully submitted,

Dated: November 30, 2006

By: _____


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